Changing paradigms for customer insights and personalized conversations

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I n a digital economy where disruption is a reality, utilities stand at a critical intersection: a stable business built over decades of legacy investments in complex infrastructure, networks and systems bisecting with rapidly-evolving business models driven by technology shifts, renewables and storage, micro-grids, customer demands and new regulations. With changes in business models and customer preferences, utilities are striving to become more nimble, versatile and customer-focused to adapt to the shifting requirements of the digital economy.

Digital disruption is changing how utilities compete in the market, primarily driven by:

- Digital mindset – Consumers are demanding digital experiences that are engaging;

- Technological advancements – Technology innovation and adoption are rapidly moving forward;

- Distributed generation – A hyper-connected ecosystem is emerging; and

- Competitive landscape – Regulatory imperatives and emerging business models are changing utility competition.

With these macro changes, utilities will need to re-configure themselves for a digital future, transforming their operations from a traditional business and IT perspective. Driving digital omni-channels and leveraging cognitive and Artificial Intelligence (AI) capabilities will become more of an essential set of initiatives, not just a desirable one. Many utilities today have a moderate social media presence and have initiated efforts with some success to develop a digital presence through on-line channels and a more modern customer-facing outlook. While this sounds like a good starting point, developing greater customer intimacy through better customer insight offers the biggest proactive customer service opportunity for utilities.

Advanced analytics will continue to remain a critical capability for utilities

Leveraging data as a valued asset (including but not limited to smart meters and omni-channels information) and proactively developing insights and actions from analytics to reduce service cost and improve customer experience are prominent drivers. Here are several examples where customer insights can be applied in specific areas to gain customer service improvements.

- Segmentation models (residential, small business and commercial) that consider census data, survey responses, consumption history, billing and payments, subscriptions and account characteristics. These models provide critical capabilities for customer journey mapping and personalization of customer services.

- Proactive determination of usage and projected bills to help customers monitor their consumption, thereby reducing calls to the service center.

- Predicting customer affinity for programs like paperless bills, account information through portals and demand side management initiatives.

- Customer churn models that can be used to develop attrition models and assign a lifetime value to the customer while monitoring the whole portfolio based on cost to serve each customer.

- Call center volume predictive modelling, which allows utilities to analyze behavioral patterns of different call types and callers against segmentation models. This translates into reduced call center volume and traffic.

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- Sentiment analytics that foster meaningful relationships between utilities and consumers by understanding engagement with consumers on social media and increasing relevance based on it.

Advanced analytics will continue to remain a critical capability for utilities, given the dynamics and nature of the disruption within the industry. Leading utilities are taking advantage of technology breakthroughs and new skill sets available in the marketplace to drive this chaotic situation to their competitive advantage.

Addressing the data deluge, ROI challenge through velocity of change

The unpredictable environment and disruptive economy will necessitate that utilities start adopting the agile model to data, analytics and information. It is also critical to adopt an iterative approach that allows utilities to test the success or failure of use cases rapidly. This will help incrementally build their platform for likely success in the future environment. While the realization of use cases, potential impact and newer delivery models such as agile approach are acknowledged, it is important to recognize that data deluge continues to pose greater challenges for utilities to derive insights and to deliver sustainable business performance. As

data sets get larger, utilities must be ready to cope with and build on the high volume and velocity of real-time structured and unstructured data.

Many utilities are still grappling with a single or 360 degree view of customers. This is particularly evident when an outage event occurs.

Whether the call is answered by a CSR or the customer uses the website, that experience and the information shared must be contextualized and engage the customer purposefully and effectively. More and more utilities are investing in Data Lake where information is seamlessly connected across all data sources, whether conventional or new age distributed generation sources. This is one key capability that can drive the organization from data deluge to analytical, actionable insights, which are meaningful and provide an improved customer experience.

Leading utilities are deriving faster insights with a use case-driven approach. This will support a range of analytics from prescriptive to descriptive. Typically, a prioritized list of use cases provides the ability to review complexity-to-implement vs business-outcomes-expected-to-be-delivered. This list goes a long way in addressing these needs.

Driving personalization

One key insight from customer behavior is the need for more personalization. Utilities need to mirror the customer-servicing standards and processes of other industries. The goal should be to move from the listen-respond paradigm of customer service to one of predicting customer needs and proactively responding to them. One key customer service tenet for utilities to incorporate into their customer service strategy is offering personalized digital customer engagement that leverages the power of conversation.

Leveraging chat bots helps reduce cost to serve

While web chats are quite popular, utilities can leverage intuitive conversational platforms or chat bots that combine the power of analytics with real-time personalized conversations for superior customer service. Conversational bots represent the best-of-breed of modern digital technology and personal customer care. With necessary security and access controls, platforms that engage customers in personalized, intuitive conversations can reduce agent cost for handling customers' social media queries while enabling quicker and better customer service. Examples of specific use cases where this can be employed include:

- Artificial Intelligence (AI) enabled front office and back office operations in utilities that leverage learning bots capable of predicting bill shocks;

- Categorizing customer complaints; and

- Resolving queries preemptively through text or voice-based conversational interfaces.

How to quickly and successfully drive digital interventions

For utilities, the key questions are often about where to begin and how to build on successful digital interventions. Grappling with a plethora of problems and a myriad of digital solutions, it can be daunting for any utility to create a meaningful digital roadmap. The digital opportunity canvas that Wipro has created for each of the utility segments provides a starting point for clients to shape their digital journey. It includes several candidate digital interventions that can be undertaken by utilities based on their goals, starting from foundational initiatives to industry trendsetters. These are firmly connected to the business goals they seek to deliver, like reducing costs, improving operational efficiency and enhancing customer experience. These Wipro initiatives also provide enough flexibility for client-specific ideas and priorities.

Key business imperatives

In summary, by employing a combination of advanced analytics for better customer insights and personalized customer service including chat bots for conversational interface, utilities can monetize data to achieve key business imperatives like:

- Delivering superior customer experience and improving customer loyalty and retention;

- Achieving higher customer satisfaction;

- Lowering total cost to serve;

- Delivering optimal outage prevention, detection and restoration for improved service reliability;

- Managing a higher penetration of demand side management and energy efficiency programs and measures; and

- Managing demand growth while optimizing costs.

About the authors

Jignesh Thakkar - Consulting Partner and Lead, Utilities Wipro Ltd.

Jignesh leads the Consulting practice and solutions for utilities in North America. He has over 20 years of experience working with clients across the globe, including US, Canada, UK, Australia and New Zealand. He has led multiple transformation programs on enterprise solutions as well as IT-OT Integration, delivering business outcomes for clients. He works out of Boston, MA, USA and can be reached at **jignesh.thakkar@wipro.com**

Dipin Abraham - Lead Architect, Digital Solutions, Utilities Wipro Ltd.

Dipin focuses on digital solutions for utilities and works closely with clients globally on their CIS transformation initiatives. He has been involved in multiple strategic CIS programs aimed at delivering business outcomes for utilities. He has been instrumental in creating next generation digital solutions for the CIS area within Wipro's Utilities practice. He works out of Bangalore, India and can be reached at **dipin.abraham@wipro.com**